

ABSTRACT OF THE DISCLOSURE

In a method of reducing a fluctuation in a cut-off voltage of a cathode for an electron tube in which a metal layer (9) for protrusively deforming a cathode substrate (7) when heated is formed on a surface (7a) of the cathode substrate (7), and an electron 5 emissive material layer (11) is formed on the front face (7a) of the cathode substrate (7) directly or through the metal layer (9) and heating means (5) for heating the electron emissive material layer (11) to emit a thermion from a front face (11a) of the electron emissive material layer (11) is provided, when the front face (11a) of the electron emissive material layer (11) is consumed and retreats, the protrusive deformation of the 10 cathode substrate (7) by the metal layer (9) is induced by a heating operation of the heating means (5) so that the front face (11a) of the electron emissive material layer (11) is correspondingly deformed protrusively.